

WHAT IS CLAIMED IS:

1. A data signal receiver programmed with a loader comprising:
 - (a) a processor containing
a signal processing block,
an initiating block initiating the loader, and
a loader control block servicing the loader based on a code initiated by the
initiating block;
 - (b) signal-receiving block;
 - (c) interfaces linked to the processor;
 - (d) RAM, ROM, and NV-RAM memory linked to the processor; and
 - (e) non-volatile memory linked to the processor,wherein a decompressing program of the loader and the loader in a compressed form are stored in the non-volatile memory and after being decompressed, by the decompressing program, the loader is stored in a section of the RAM memory, the section being declared as ROM memory.
2. The data signal receiver according to claim 1 wherein the signal processing block is connected to the data source through a GSM signal transmitting/receiving block and/or an external interface block.

3. The data signal receiver according to claim 1 wherein an memory image is created from a section containing a loader's booting sequence, a section containing a loader's jump table and a section containing a segment with loader's static data and loader's code wherein the memory image is stored in non-volatile memory in a compressed form.
4. The data signal receiver according to claim 3 wherein the loader's jump table contains addresses of functions common to a decompressing program and the loader, the functions are defined in the decompressing program.
5. The data signal receiver according to claim 1 wherein the loader's code after decompressing is located at a permanent address in the RAM memory.
6. The data signal receiver according to claim 1 wherein the non-volatile memory is FLASH memory.
7. A method for updating software in a data signal receiver having a processor and interfaces, RAM, ROM, NV-RAM and non-volatile memory linked to the processor comprising:
storing of software containing a loader in a compressed form in the non-volatile RAM memory; and

upon initiating startup procedure, copying the software to a permanent address in a section of the RAM memory, declared as ROM type memory prior to a software linking process.

8. The method for updating software according to claim 7 wherein a startup procedure of the loader is executed upon connecting the data signal receiver to a power source.

9. The method for updating software according to claim 7 wherein a startup procedure of the loader is initiated at a user's request.

10. The method for updating software according to claim 7 wherein a startup procedure of the loader is initiated by an external signal, transmitted to the data signal receiver.

11. The method for updating software according to claim 7 wherein a memory image is created from a section containing a starting sequence of the loader, a section containing of a jump table of the loader and a section containing area with static data of the loader and its code and then the memory image is stored in non-volatile memory in a compressed form.

12. The method for updating software according to claim 7 further comprising creating a jump table of the loader, the jump table containing addresses of functions common to the decompressing program and the loader, defined in the decompressing program.

13. The method for updating software according to claim 7 further comprising
checking whether a software currently broadcasted in the data signal is meant for the data signal receiver, in which the loader has been initiated after initiating an application update procedure; and
accepting the application update procedure when the program currently broadcasted in the data signal is meant for the data signal receiver, in which the loader has been initiated.